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U. S. COAST AND GEODETIC SURVEY
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T I D A L B E N C H M A R K S

DISTRICT OF COLUMBIA

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January, 1944

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TIDAL BENCH MARKS, DISTRICT OF COLUMBIA

GENERAL STATEMENT

The descriptions and elevations of tidal bench marks in this publication supersede those given in Special Publication No. 119, "Tidal Bench Marks, District of Columbia", published in 1925.

The datum in general use for hydrographic work along the Atlantic coast of the United States is mean low water, which is the average height of all low waters in any locality over a considerable period of time. Unless the series of observations covers many years, corrections are applied to eliminate known variations and reduce the result to a mean value.

In this publication the elevations are referred to "District of Columbia Low Water Datum" which is defined as 91.95 feet below "Capitol Bench Mark, U. S. Coast and Geodetic Survey, 1884", described on page 3. This datum was adopted by agreement with the District Engineer, U. S. Engineer Office, Washington, D. C. It has been the reference for waterfront construction, maps, charts, bench marks, and other records of the U. S. Engineer Office for a long time, and also has been adopted by the National Park Service for work in the Washington area.

There is a distinction between "mean low water" and "low water datum". Mean low water is the best determination of that tidal plane from any given series of tide observations, and where such observations are being continued, is subject to change. A low water datum is a datum adopted from a given series of observations as a standard reference plane and is retained for an indefinite period regardless of the fact that it may differ slightly from a later determination of mean low water.

A primary tide station is now being maintained by this Bureau at the Coast Guard Wharf, Washington Channel, near the foot of O Street, S. W. Based on eleven years of tide records (1932-1942) at this station the elevations of local tide planes referred to the "District of Columbia Low Water datum" are as follows:

	Feet
Highest tide (Oct. 17, 1942)	11.9
Mean high water	3.27
Mean river level	1.83
Half tide level	1.81
*Sea-level datum of 1929	1.41
Mean low water	0.35
Low water datum	0.00
Lowest tide (Feb. 15, 1940)	-3.0

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GENERAL STATEMENT (cont'd.)

In the above table the high tide of October 17, 1942, given as 11.9 feet above low water datum is the highest on record for the vicinity of the Coast Guard Wharf and was caused by flood conditions in the upper Potomac. In the vicinity of Key Bridge, Georgetown this high water reached the height of approximately 19.8 feet above the low water datum. The low tide of February 15, 1940, given as 3.0 feet below low water datum is the lowest observed during the period of observations at the Coast Guard Wharf. However, a low tide approximating 5 feet below low water datum has been reported at the Navy Yard. For subsequent or more detailed information relative to extreme heights, inquiry should be made of this Bureau, which for its primary tide stations keeps on file a compilation of the dates and heights of the highest and lowest tides recorded each month.

Mean high water is the average height of all high waters for the period of observations.

Half tide level, also called mean tide level, is the plane midway between mean high water and mean low water. On the open coast this plane approximates to mean sea level.

Mean river level is the average height of the surface of the river for all stages of the tide and is determined from hourly height readings.

The Sea-level Datum of 1929 is the datum that has been adopted for the precise level net of the country and is based on the mean sea level at a number of selected tide stations. The elevations of the bench marks in the net have been adjusted to this datum. Being located on the Potomac River a considerable distance from the open ocean, the tide observations at Washington were not used in the determination of the Sea-level Datum of 1929. This datum, however, has been carried into the District of Columbia by lines of precise levels.

In general this publication includes only bench marks along the waterfront. For information in regard to other bench marks in the District which have been connected with the level net and which are referred to the Sea-level Datum of 1929, application should be made to the Director, U. S. Coast and Geodetic Survey, Washington 25, D. C.

Although a bench mark may appear to be quite permanent in character, the elevation may have changed, due to settling or from other causes. Engineers are, therefore, cautioned to connect with two or more bench marks whenever possible.

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GENERAL STATEMENT (cont'd.)

It will be appreciated if anyone recovering marks that are inadequately described, or appear to have changed elevation, will report the same to the Director, U. S. Coast and Geodetic Survey, Washington 25, D. C. Such a report will not only be a service to this Bureau but to all engineers and surveyors who may have occasion to do leveling in the locality in the future.

More detailed information concerning tidal datum planes and the tide in general may be obtained in the following U. S. Coast and Geodetic Survey publications:

Special Pub. 135 Tidal Datum Planes (1927) \$0.30
Special Pub. 196 Manual of Tide Observations (1941) \$0.20
Special Pub. 228 Tide and Current Glossary (1941) \$0.10

The above publications may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. at the prices indicated.

DESCRIPTIONS AND ELEVATIONS OF BENCH MARKS

Capitol B. M. -- At the Capitol, under the first window west of the southeast corner of the Senate wing, and in the granite water table. The top of a bronze bolt in the middle of a bronze plate (5 inches square) inscribed "Capitol Bench Mark, U. S. Coast and Geodetic Survey, 1884". Elevation: 91.95 feet above low water datum.

B. M. 52 (D. C. Engrs.) -- At the Capitol, at the north side of the steps of the main (eastern) entrance. The extreme northeast corner of the blue imitation granite water table. Elevation: 91.97 feet above low water datum. NOTE: In the City "Book of Gradations", by Nicolas King, bearing the date of 1815 and referring back to 1797, the elevation of the foundation course of the Capitol is given as 86.86 feet above an assumed "mean high water". When this foundation course was covered, the bench mark was changed to the water table and 3 feet added for the thickness of the intervening course of stone.

M 14 = Capitol (P.B. & P.P.) -- At the Capitol, at the southeast corner of the House wing, in the top of the lowest step, $\frac{1}{2}$ inch west of the next higher step and $\frac{1}{2}$ inch south of the south wall. A Public Buildings and Public Parks standard disk stamped "M 14". Elevation: 88.51 feet above low water datum.

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T -- At the intersection of Independence and New Jersey Avenues, Southeast, south of the steps leading to the northwest entrance to the old House Office Building, in the top of the marble water table and about 9 inches higher than the sidewalk. A standard disk stamped "T 1923". Elevation: 76.10 feet above low water datum.

300 = Wallach (P.B. & P.P.) -- At Eighth and D Streets, Southeast, at the Wallach School, at the Eighth Street entrance, and in the north end of the bottom step. A Public Buildings and Public Parks standard disk stamped "300". Elevation: 84.55 feet above low water datum.

V -- At the Navy Yard at the foot of Eighth Street, Southeast, at the northwest corner of the Yard, at the northwest corner of building 153 and in the sloping concrete foundation of a supporting column. A standard disk stamped "V". Elevation: 17.67 feet above low water datum.

17a (D. C. Engrs.) -- At the Navy Yard at the foot of Eighth Street, Southeast, at the main gate, and on the stone foundation of the eastern column at the entrance. The top of the northeast corner of the foundation. Elevation: 44.90 feet above low water datum.

W = 325 (P.B. & P.P.) -- At the Navy Yard at the foot of Eighth Street, Southeast, near the main gate, at the west side of Dahlgren Avenue, at the "Old Maine Gun", and in the south side of the foundation. A standard disk stamped "W 1923". Elevation: 44.65 feet above low water datum.

B. M. 14 = Ordnance B. M. -- At the Navy Yard at the foot of Eighth Street, Southeast, at the main entrance to the Ordnance Office (building 44), and in the north end of the granite doorstep. The bottom of a square hole about 0.15 inch deep, surrounded by the chiseled letters "U.S.C. & G.S. B.M." Elevation: 17.64 feet above low water datum.

1 (W.N.Y.) -- At the Navy Yard at the foot of Eighth Street, Southeast, on Ninth Street at the east entrance to the optical shop (building 157), in the pavement, 1 foot south of the north edge of the doorway and 1.7 feet east of a steel door. A Washington Navy Yard standard disk. Elevation: 39.50 feet above low water datum.

X -- At the Navy Yard at the foot of Eighth Street, Southeast, at the northeast corner of the intersection of Dahlgren Avenue and Montgomery Square, at the west side of building 108, at the first door from the south end of the building, and in the south end of the doorsill. A standard disk stamped "X". Elevation: 13.15 feet above low water datum.

G 2 -- At the Navy Yard at the foot of Eighth Street, Southeast, at the southwest corner of the Gun Shop, and in the south side of the granite foundation. The highest point of a barrel-shaped knob on the projecting end of a brass bolt, the exposed end of which is stamped "G 2". Elevation: 10.98 feet above low water datum.

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B. M. 12 = C (W.N.Y.) -- At the Navy Yard at the foot of Eighth Street, Southeast, at building 1 (former Commandant's Office), at the brick column under the southwest corner of the porch, at the south side, at the west edge of the upper surface of the iron plate, and about 1 foot higher than the pavement. The outer $\frac{1}{2}$ inch of the ledge. Elevation: 10.64 feet above low water datum.

H 2 -- At the Navy Yard at the foot of Eighth Street, Southeast, at the Proof Building, and in the east side about 6 paces south of the northeast corner. The highest point of a barrel-shaped knob on the projecting end of a bronze bolt, the exposed end of which is stamped "H 2". Elevation: 27.88 feet above low water datum.

Y -- At the Navy Yard at the foot of Eighth Street, Southeast, at Willard Park, south of building 111, and in the top of a concrete block formerly supporting the east leg of the east radio tower. A standard disk, stamped "Y". Elevation: 10.20 feet above low water datum.

2 (W.N.Y.) -- At the Navy Yard at the foot of Eighth Street, Southeast, at the northwest corner of Patterson Avenue and Sicard Street, at the east door in the south side of the building 142, in the top of the step, 9 inches south of the door sill and 3 inches from the west face of the doorway. A Washington Navy Yard standard disk. Elevation: 8.30 feet above low water datum.

3 (W.N.Y.) -- At the Navy Yard at the foot of Eighth Street, Southeast, at the west side of building 76, at the second large door north of Sicard Street, in the pavement, 14 inches out from door, and 2 inches from the north edge of the doorway. A Washington Navy Yard standard disk. Elevation: 8.98 feet above low water datum.

4 (W.N.Y.) -- At the Navy Yard at the foot of Eighth Street, Southeast, on Isaac Hull Avenue, at the east side of building 113, at a large door, in the pavement, 14 inches out from the door, and 3 inches south of the north edge of the doorway. A Washington Navy Yard standard disk. Elevation: 9.41 feet above low water datum.

5 (W.N.Y.) -- At the Navy Yard at the foot of Eighth Street, Southeast, at the northeast corner of Tingey and Fourth Streets, 24.7 feet east of building 135, 4.3 feet southwest of a fire hydrant, and in the southeast corner of the west crane runway footing adjacent to the building. A Washington Navy Yard standard disk. Elevation: 13.39 feet above low water datum.

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6 (W.N.Y.) -- At the Navy Yard at the foot of Eighth Street, Southeast, near the northwest corner of the Yard, at the north side of building 159, at the east side of the west door, in the pavement, 6 inches out from the door, and 4 inches from the east side of the doorway. A Washington Navy Yard standard disk. Elevation: 15.25 feet above low water datum.

B. M. 31 -- On the east side of Fourth Street, Southwest, south of N Street, at the first Church of Christ, and on the south end of the stone door sill. A chiseled cross. Elevation: 22.93 feet above low water datum.

Z -- At the south side of P Street, Southwest, at the foot of Fourth Street, at building 44a of Fort Humphreys, used in June 1941 as the Post Exchange, at the north side of the building, west of the third window from the east end, in the water table, and about 4 feet higher than the ground. A standard disk stamped "Z 1923". Elevation: 23.84 feet above low water datum.

A 1 -- At the northwest corner of Fourth and P Streets, Southwest, at the Capital Transit Company car barn, about 2 feet west of the southeast corner, and in the top of the stone water table. A standard disk stamped "A 1 1923". Elevation: 20.25 feet above low water datum.

B 1 -- At the southwest side of Maine Avenue, Southwest, at the entrance to the Coast Guard Wharf, at the southeast gate post, and in the top of the concrete foundation on the side next to the driveway. A standard disk stamped "B 1 1923". Elevation: 12.59 feet above low water datum.

B. M. 78 -- At the northwest corner of Seventh and K Streets, Southwest, at the building used in June 1941 as an office by George E. Walker, Inc., and on the south end of the stone sill of the south door. A faint chiseled cross. Elevation: 19.20 feet above low water datum.

EP 8 = North Sea Wall (P.B. & P.P.) -- In East Potomac Park, at the Washington Channel side, in line with the northwest side of the southeast section of the golf field house, and in the top of the sea wall near the center. A Public Buildings and Public Parks standard disk. Elevation: 5.18 feet above low water datum. NOTE: This bench mark is unstable.

EP 9 = Golf House (P.B. & P.P.) -- In East Potomac Park, at the golf field house, at the northwest corner of the eastern wing, at the northwest corner of the porch, in the north face of the small retaining wall around a basement window, 3 feet below the top of the wall and 6 inches east of the northwest corner. A Public Buildings and Public Parks standard disk set vertically. Elevation: 14.52 feet above low water datum. NOTE: This bench mark is unstable.

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130 (U.S.E.) = EP 7 (P.B. & P.P.) -- In East Potomac Park, at the Washington Channel side, 20 feet south of lamppost 128, and 2 feet east of the road. A Corps of Engineers, U. S. Army, standard disk. Elevation: 8.49 feet above low water datum. NOTE: This bench mark is unstable.

EP 6 = Boat Landing (P.B. & P.P.) -- In East Potomac Park, at the Washington Channel side, opposite a point 49 feet upstream from lamppost 84, opposite the upstream side of the boat landing near Haines Point, in the concrete walk, between the guard rail and the river side of the walk, and 8 inches from the outer edge. A Public Buildings and Public Parks standard disk. Elevation: 4.83 feet above low water datum.
NOTE: This bench mark is unstable.

EP 4 = Field House (P.B. & P.P.) -- In East Potomac Park, at the Haines Point Tea House, at the east side, in the southeast corner of the porch, 11 feet east of the wall, 3 inches west of a corner pillar, and 10 inches from the south edge of the porch. A Public Buildings and Public Parks standard disk. Elevation: 10.55 feet above low water datum. NOTE: This bench mark is unstable.

10.72 (U.S.E.) = EP 1 (P.B. & P.P.) -- In East Potomac Park, at the Pennsylvania Railroad bridge over Potomac River, at the northeast abutment, $2\frac{1}{2}$ feet northwest of the southeast corner, $2\frac{1}{2}$ feet higher than the ground, and in the center of a stone lettered "U.S.B.M. 10.72". A 3/4-inch iron bolt set horizontally and projecting about $1\frac{1}{4}$ inches. Elevation: 10.65 feet above low water datum.

EP 10 = North Abutment (P.B. & P.P.) -- In East Potomac Park, at the Pennsylvania Railroad bridge over Potomac River, at the northeast abutment, about 5 feet northwest of B. M. 10.72 (U.S.E.), described above, and about 3 feet higher than the ground. A Public Buildings and Public Parks standard disk set vertically. Elevation: 10.63 feet above low water datum.

Potomac Park Northwest Base = EP 2 (P.B. & P.P.) -- In East Potomac Park, near the north corner of the tourist camp, about 65 yards east of the camp office, 41 feet northeast of Maine Street, 118 feet southeast of the southeast end of the building known as the "Ice Cream Bar", and about 2 yards southwest of a line of maple trees along the northeast boundary of the camp. A standard triangulation station disk set in the top of an 18-inch square block of concrete projecting about 2 feet above ground. Elevation: 13.24 feet above low water datum. NOTE: This bench mark is unstable.

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Highway Bridge (U.S.E.) -- In East Potomac Park, at the highway bridge over Potomac River, at the northeast abutment, at the northwest end of the northwest wing wall, in the top of the horizontal stone at the angle in the steps leading up to the bridge floor, and about 4 feet higher than the ground. The top of a 3/4-inch iron bolt. Elevation: 10.94 feet above low water datum.

M 10 = Inlet Bridge (P.B. & P.P.) -- In West Potomac Park, near the inlet to the Tidal Basin, 90 feet west of the west end of the Inlet Bridge, and in the top of the west sea wall. A Public Buildings and Public Parks standard disk. Elevation: 5.15 feet above low water datum.

M 9 = Storehouse (P.B. & P.P.) -- West across Fifteenth Street from the north end of the Bureau of Engraving and Printing, at a one-story brick building used as a stock room by the National Capital Parks, in the east wall, about 4 feet west of the west curb of the street, 21 feet north of the southeast corner, 3 feet south of the south edge of the south doorway, and about $2\frac{1}{2}$ feet higher than the ground. A Public Buildings and Public Parks standard disk, stamped "M 9", set vertically. Elevation: 32.55 feet above low water datum.

Survey Lodge (?) -- At the National Capital Parks survey lodge between the Washington Monument and the Tidal Basin, at the door in the south side, about 5 feet west of the southeast corner of the building, on the stone door sill, about $1\frac{1}{2}$ inches north of the south side of the sill, and about $2\frac{1}{2}$ inches west of the door jamb. A chiseled cross. Elevation: 18.05 feet above low water datum.

M 5 = Paul Jones (P.B. & P.P.) -- In West Potomac Park, at the end of Seventeenth Street, at the John Paul Jones monument, on the northeast corner of the pedestal, and about 3 feet higher than the ground. A faint chiseled cross. Elevation: 13.28 feet above low water datum.

I = M 8 (P.B. & P.P.) -- At the Washington Monument, at the small lodge at the foot of the east slope, at the main entrance, on the top of the top step, at the north end, 3 inches from the east edge and 3 inches from the south side of the base of a column. The southwest quadrant of a chiseled cross. Elevation: 21.93 feet above low water datum.

A = R. M. 92 = M 6 (P.B. & P.P.) -- About 110 feet south of the Washington Monument, south of the road and on the top surface of an underground obelisk covered with an iron plate. The top of the obelisk. Elevation: 38.22 feet above low water datum.

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C 1 = M 7 (P.B. & P.P.) -- At the entrance to the Washington Monument, in the north end of the stone door sill, and about 3 feet west of the east face of the monument. A standard disk stamped "C 1". Elevation: 42.65 feet above low water datum.

Meridian Stone -- South of the White House, at the center of the Ellipse, and in the center of the top of the Meridian Stone. A copper bolt set in the top of a stone post lettered "U.S. MERIDIAN 1890" and about flush with the ground. Elevation: 19.30 feet above low water datum.

Zero Milestone = NW 2 (P.B. & P.P.) -- At the junction of the Ellipse roadway and the roadway south of the White House grounds, at the north side of the Ellipse, and between the two concrete sidewalks. The top of a small pyramid at the center of a bronze compass rose on the top of the Zero Milestone. Elevation: 29.79 feet above low water datum. NOTE: The above elevation was determined by the U. S. Coast and Geodetic Survey in 1942. Repeated levelings have shown that this bench mark is settling.

M 1 = Lincoln (P.B. & P.P.) -- At the Lincoln Memorial, just south of the main steps, directly behind a granite bench, and in the top of the granite coping. A Public Buildings and Public Parks standard disk stamped "M 1". Elevation: 30.15 feet above low water datum.

Braddock's Rock -- At the intersection of Constitution Avenue and Twenty-third Street, Northwest, at the former Naval Hospital reservation, at Ward H (frame temporary building shaped like a capital "H"), between the two long wings and southeast of the central connecting building, below the southwest side of the northeast wing, and in the top of a rock outcrop surrounded by a square brick well about 8 feet deep. The top of a $1\frac{1}{2}$ -inch bolt. Elevation: 16.61 feet above low water datum.

E 1 = RCPP1 (P.B. & P.P.) -- On the north side of Water Street, Northwest, between Twenty-fifth and Twenty-sixth Streets, in the south wall of the Heurick Brewery, about 15 feet west of the entrance to the office and about 2 feet higher than the ground. A standard disk. Elevation: 24.58 feet above low water datum.

F 1 = RCPP 2 (P.B. & P.P.) -- At the northeast corner of Twenty-sixth and G Streets, Northwest, at an office of the Washington Gas Light Company, in the west wall, $3/4$ foot south of the northwest corner of the building, and about $3\frac{1}{2}$ feet higher than the sidewalk. A standard disk stamped "F 1 1914". Elevation: 34.14 feet above low water datum.

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326 = Analostan (P.B. & P.P.) -- On Theodore Roosevelt Island (formerly Analostan Island), about 300 feet south of the northwest point, about 130 feet from the ruins of an old causeway formerly connecting the island with the Virginia shore, at the west side of the island, and in the top of a large rock outcrop at the edge of the water. A Public Buildings and Public Parks standard disk. Elevation: 4.93 feet above low water datum.

327 = Channel (P.B. & P.P.) -- On Theodore Roosevelt Island (formerly Analostan Island), at the south end, about 350 feet north of the north end of Columbia Island, about 150 feet south of a line of piling (ruins of an old causeway connecting the island with the Virginia shore), at the west side of the island, and in the top of a large rock outcrop. A Public Buildings and Public Parks standard disk. Elevation: 8.45 feet above low water datum.

G 1 RESET -- At the K Street bridge over Rock Creek and the Rock Creek and Potomac Park Parkway, about 130 feet east of the east curb of Twenty-ninth Street, Northwest, at the north roadway leading from the parkway to K Street, at the south side of the road, at the foot of the K Street retaining wall, and in the narrow walk between the curb and the wall. A standard disk, stamped "G 1 RESET 1940". Elevation: 23.65 feet above low water datum. NOTE: This bench mark was established and its elevation determined by a U. S. Coast and Geodetic Survey party in July 1941.

Monument (Treas. Dept. Proc. Div.) -- At the southeast corner of Thirtieth and K Streets, Northwest, near the Baltimore & Ohio Railroad freight station, $14\frac{1}{2}$ feet east of Thirtieth Street curb, and 8 feet south of the K Street curb. A brass plug, set in concrete about flush with the ground. Elevation: 13.74 feet above low water datum.

H 2 X -- On K Street, Northwest, between Wisconsin Avenue and Thirty-first Street, at the north side of the street, at the District of Columbia incinerator plant, at the east side of the building, at the lower truck doorway, in the wall just north of the door, and about 4 feet higher than the ground. A standard disk, stamped "H 2 X 1933", and set vertically. Elevation: 32.32 feet above low water datum.

R. M. 3 (U.S.G.S.) -- On K Street, Northwest, between Wisconsin Avenue and Thirty-first Street, at the north side of the street, at the District of Columbia incinerator plant, in the south face of the foundation of the stack, 3.31 feet below the top of the granite facing, 2.08 feet from the east corner of the foundation, and in a joint of the facing. A horizontal hairline on the end of a $\frac{1}{2}$ -inch copper bolt. Elevation: 24.73 feet above low water datum.

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Flood Mark (U.S.G.S.) -- At the foot of Wisconsin Avenue, Northwest, south of K Street, at the U. S. Geological Survey gage house, in the east concrete wall, near the clean-out door, and about 4 feet higher than the ground. A U. S. Geological Survey standard flood-mark disk, stamped "MARCH 19 1936" and set vertically. Elevation: 17.32 feet above low water datum.

R. M. 1 (U.S.G.S.) -- At the foot of Wisconsin Avenue, Northwest, south of K Street, 25 feet streamward and 20 feet downstream from a concrete gage house, in the top of the concrete wall around the gate pit nearest to the dock line, and under planking. A U. S. Geological Survey standard gaging-station reference mark disk. Elevation: 16.33 feet above low water datum. NOTE: The planking over the mark can easily be removed for the purpose of standing a rod on the disk.

R. M. 2 (U.S.G.S.) -- At the foot of Wisconsin Avenue, Northwest, south of K Street, 55.7 feet from the downstream shoreward corner of a concrete gage house, 28.5 feet from the nearest (southwest) corner of the abandoned Capital Traction Company power house, in the west chimney, and about 4.3 feet higher than the ground. A horizontal hair line on the end of a $\frac{1}{2}$ -inch copper bolt. Elevation: 18.90 feet above low water datum.

H 1 -- On K Street, Northwest, at Key Bridge, at the pier between K Street and the north bank of the Potomac River, in the top of the base of the pier, east of the west leg, about 12 feet east of the northwest corner of the pier, and about level with K Street. A standard disk. Elevation: 17.95 feet above low water datum. NOTE: It was reported in December 1940 that a large gas main extends from the ground diagonally upward over the disk so that a rod could not be held plumb on it.

G 2 X -- On K Street, Northwest, at Key Bridge, in the same horizontal surface as Bench Mark H 1, described above, and about 11 feet east of that mark. A standard disk, stamped "G 2 X 1933". Elevation: 17.91 feet above low water datum.

J 1 = NW 23 (P.B. & P.P.) -- At the north end of Key Fridge, at the foot of the fourth lamppost from the north end, and in the west side of the west sidewalk. A standard disk stamped "J 1 1923". Elevation: 74.75 feet above low water datum.

NW 22 (P.B. & P.P.) -- At Thirty-fifth and M Streets, Northwest, about 65 feet south of the center line of M Street, at the north end of Key Bridge, in the north corner of the northwest wing wall of the bridge, 5 feet northwest of the memorial tablet to Francis Scott Key, and level with the sidewalk. A Public Buildings and Public Parks standard disk stamped "NW 22". Elevation: 73.13 feet above low water datum.

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Archway (U.S.E.) -- On K Street, Northwest, west of Key Bridge, at a stone arch over the street (only remains of the old Aqueduct Bridge), at the southeast corner of the arch, south of the Baltimore & Ohio Railroad track, in the top of the water table, and about 4 feet higher than the ground. The top of a 3/4-inch iron bolt leaded vertically in the stone and projecting about 1 3/4 inches above the water table. Elevation: 18.37 feet above low water datum.

RV 58 (B. & O. RR.) -- On the Baltimore & Ohio Railroad, about 400 feet west of Key Bridge, about 45 feet west of the arch of the Old Aqueduct Bridge, about 100 feet south of the Chesapeake & Ohio Canal, in the center of the east side of the concrete foundation of a water spout, 9 feet north of the center line of the track, and 1 foot below the top of the rail. A standard Monel-metal rivet. Elevation: 13.32 feet above low water datum.

XI -- Along K Street, Northwest, west of Key Bridge, at a stone arch over the street (only remains of the old Aqueduct Bridge), at the west wing wall of the north abutment, on the water table below the former canal level, about 7 feet lower than the top of the wing wall, and about 11 feet from the west end of the wall. The bottom of a square hole. Elevation: 32.93 feet above low water datum.

M 1 -- On Canal Road, Northwest, at the junction of Foxhall Road, about 20 yards southeast of the point of intersection of the southwest curb of Foxhall Road and the north curb of Canal Road, at the south side of Canal Road, and in the top of the masonry wall separating the road from the canal. A standard disk stamped "M 1 1925". Elevation: 47.40 feet above low water datum.

L 1 -- On Benning Road, Northeast, at the Potomac Electric Power Company generating plant, at the southwest corner, at the entrance to the machine shop, and in the west end of the door sill. A standard disk. Elevation: 17.59 feet above low water datum.

302 = Naylor Road (P.B. & P.P.) -- In Anacostia Park, at a sewer outlet entering the river between the Pennsylvania Avenue and Eleventh Street bridges, between the field house and Pennsylvania Avenue, in the top of the concrete head wall, 1.5 feet south of the north edge, and 1.5 feet west of the east edge. A Public Buildings and Public Parks standard disk, stamped "302". Elevation: 10.31 feet above low water datum.

303 = Field House (P.B. & P.P.) -- In Anacostia Park, between the Pennsylvania Avenue and Eleventh Street bridges, at the field house, in the southeast corner of the concrete porch, 4 feet west of the west wall, and 1 foot north of the north face of an offset. A Public Buildings and Public Parks standard disk stamped "303". Elevation: 20.23 feet above low water datum.

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304 = Good Hope Run (P.B. & P.P.) -- In Anacostia Park, at the second sewer outlet northeast of the Eleventh Street bridge, in the top of the concrete head wall, 1.5 feet south of the north edge, and 2 feet west of the east edge. A Public Buildings and Public Parks standard disk, stamped "304". Elevation: 10.31 feet above low water datum.

305 = Fillmore (P.B. & P.P.) -- In Anacostia Park, at the first sewer outlet northeast of the Eleventh Street bridge, about 100 yards northeast of the bridge, in the top of the concrete slab over the outlet, about 1.5 feet north of the south edge and 1.5 feet west of the east edge of the stone coping around the slab. A Public Buildings and Public Parks standard disk stamped "305". Elevation: 9.52 feet above low water datum.

T.B.M. 27.25 -- At the southeast end of the Eleventh Street bridge, 7 inches northwest of the concrete base of a lamp standard, and 10 inches southwest of the edge of the sidewalk. An outlined square. Elevation: 28.66 feet above low water datum. NOTE: This bench mark was established and its elevation determined in March 1935 by a party from this Bureau.

318 = Pump (P.B. & P.P.) -- At the Poplar Point pumping station, in the north wall of the south wing, 14 inches east of the northwest corner, and 20 inches higher than the macadam driveway. A Public Buildings and Public Parks standard disk, stamped "318", set vertically. Elevation: 9.99 feet above low water datum.

317 = Air (P.B. & P.P.) -- At the Naval Air Station, at supply storage building 66, in the north wall, 7 inches west of the northwest corner, and 1 foot higher than the concrete pavement. A Public Buildings and Public Parks standard disk set vertically. Elevation: 6.89 feet above low water datum.

V 1 = 322 (P.B. & P.P.) -- About 1 mile southeast along the Baltimore & Ohio Railroad from the "Uniontown" freight station in Anacostia, at the tank-car siding at the Naval Air Station, near a shop building, opposite the frog of the siding, in the top of the northeast end of a concrete retaining wall, and 26 feet west of the west rail of the main track. A standard disk stamped "V 1 1931". Elevation: 12.99 feet above low water datum.

314 = Bellevue (P.B. & P.P.) -- At the Naval Research Laboratory at Bellevue, at building 7, in the north end of the concrete loading platform along the east side, 11 inches west of the east edge, and 11 inches south of the north edge. A Public Buildings and Public Parks standard disk. Elevation: 26.19 feet above low water datum.

TIDAL BENCH MARKS, DISTRICT OF COLUMBIA

W 1 = 323 (P.B. & P.P.) -- At the Naval Research Laboratory at Bellevue, at the administration building, at the main entrance on the south side, in the concrete shoulder at the east side of the steps, and about $2\frac{1}{2}$ feet higher than the sidewalk. A standard disk stamped "W 1 1931". Elevation: 24.47 feet above low water datum.

X 1 = 324 (P.B. & P.P.) -- At the Naval Research Laboratory at Bellevue, at the center radio tower, in the top of the most easterly concrete footing, and about 3 feet higher than the ground. A standard disk stamped "X 1 1931". Elevation: 21.91 feet above low water datum.

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